



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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City of Westbrook –
Westbrook School Department
Cumberland County
Westbrook, Maine
A-114-71-G-N (SM)

**Departmental
Findings of Fact and Order
Air Emission License
After-the-Fact Renewal**

After review of the air emissions license renewal application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., §344 and §590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

The Air Emission License for Westbrook School Department expired on April 5, 2011. Westbrook School Department has applied to renew their expired license permitting the operation of emission sources associated with their educational facilities.

The equipment addressed in this license is located at the following facilities in Westbrook, Maine: Westbrook High School, Westbrook Regional Vocational Center, Canal School, Saccarappa Elementary School, Westbrook Middle School, Congin Elementary School, Prides Corner Elementary School, and the Westbrook School Department Superintendent's Office.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

<u>Boiler</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate*</u>	<u>Fuel Type</u>	<u>Install. Date</u>	<u>Location (Stack)</u>
WHS1	1.5	1471 scf/hr	Natural gas	2010	Westbrook High School (High School Stack)
WHS2	1.5	1471 scf/hr			
WHS3	1.5	1471 scf/hr			
WHS4	1.5	1471 scf/hr			
VOC1	8.3	8137 scf/hr		2008	Vocational School (Voc. School Stack)

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17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
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RAY BLDG., HOSPITAL ST.

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106 HOGAN ROAD, SUITE 6
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PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
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PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04679-2094
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<u>Boiler</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate*</u>	<u>Fuel Type</u>	<u>Install. Date</u>	<u>Location (Stack)</u>
CNL1	2.8	2745 scf/hr	Natural gas	2000	Canal School (Canal School Stack)
CNL2	2.5	2451 scf/hr natural gas, 17.9 gal/hr #2 fuel oil	Natural gas, #2 fuel oil	1998	
SUP1	1.3	9.3 gal/hr	#2 fuel oil	1974	Superintendent's Office (Supt. Office Stack)
SES1	1.3	1275 scf/hr natural gas, 9.3 gal/hr #2 fuel oil	Natural gas, #2 fuel oil	2011	Saccarappa Elementary School (Saccarappa Stack)
SES2	1.3	1275 scf/hr natural gas, 9.3 gal/hr #2 fuel oil			
CES1	5.9	5784 scf/hr	Natural gas	2003	Congin Elementary School (Congin School Stack)
PrC1	2.1	15 gal/hr	#2 fuel oil	1988	Prides Corner Elementary School (Prides Corner Stack)

* Maximum firing rate is based on heat contents of 0.14 MMBtu/gal #2 fuel oil and 1020 Btu/scf natural gas.

Generators

<u>Generator</u>	<u>Kilowatts (kW)</u>	<u>Maximum Capacity, MMBtu/hr</u>	<u>Firing Rate* (gal/hr)</u>	<u>Fuel Type, % sulfur</u>	<u>Install. Date</u>
VOC2	200	2.2	16	Diesel, 0.0015%	2001
CNL3	100	1.1	8		2002
WMS	275	3.0	22		2010
CES2	100	1.1	8		2005

* Firing rate is based on heat content of 0.137 MMBtu/gal diesel fuel.

Westbrook School Department also operates the following fuel burning units which are below the licensing threshold input capacity of 1.0 MMBtu/hr each, and are therefore listed here for inventory purposes only.

<u>Equipment</u>	<u>Max. Capacity, MMBtu/hr</u>	<u>Fuel Type, % sulfur</u>
(1) Hot Water Heater, WHS5	0.61	Natural gas
(2) Hot Water Heaters, VOC3	0.2 each	Natural gas
(2) Hot Water Heaters, SES	0.15 each	# 2 fuel oil
(1) Hot Water Heater, CES	0.41	Natural gas
(2) Hot Water Heaters, PrC	0.15 each	# 2 fuel oil

C. Application Classification

The previous air emission license for Westbrook School Department expired on April 5, 2011. A complete application was not submitted prior to the expiration date; therefore, Westbrook School Department is considered to be an existing source applying for an after-the-fact renewal. The Department has determined the facility is a minor source and the application has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (as amended). With the restriction on the operating hours of the emergency generators, the facility is licensed below the major source thresholds and is considered a synthetic minor.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (as amended). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas. BPT for an after-the-fact renewal requires an analysis similar to a Best Available Control Technology analysis per 06-096 CMR 115 (as amended).

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 CMR 100 (as amended), is a top-down approach to selecting air emission controls considering economic, environmental, and energy impacts.

B. Boilers

Westbrook School Department operates 12 boilers, located in various buildings in their system, which are subject to air emission licensing requirements. The boilers consist of seven natural gas fired boilers, two #2 fuel oil fired boilers, and three which have dual-fuel capacity to fire both natural gas and #2 fuel oil. The boilers are operated to provide heat and hot water for the buildings. Every building identified in the table above has one stack through which fuel burning equipment operated in that building exhaust.

Because none of these 12 boilers have a maximum input capacity greater than 10 MMBtu/hr, none of the 12 boilers are subject to the requirements of New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, for units greater than 10 MMBtu/hr manufactured after June 9, 1989.

1. BACT/BPT Findings

The BACT/BPT emission limits for the boilers were based on the following:

#2 Fuel Oil

PM, PM ₁₀ –	0.08 lb/MMBtu, BAQ Licensing Guidance, 8/06, and previously licensed limit; BPT
SO ₂ –	0.5 lb/MMBtu, based on firing ASTM D396 compliant #2 fuel oil (0.5% sulfur)
NO _x –	20 lb/1000 gal, AP-42, Table 1.3-1, dated 5/10
CO –	5 lb/1000 gal, AP-42, Table 1.3-1, dated 5/10
VOC –	0.2 lb/1000 gal, AP-42, Table 1.3-3, dated 5/10
Opacity –	06-096 CMR 101 (dated 5/03)

Natural Gas

PM, PM ₁₀ –	0.05 lb/MMBtu, DEP BAQ Licensing Guidance, and previously licensed limit; 8/06, BPT
SO ₂ –	0.6 lb/MMscf, AP-42, Table 1.4-2 (dated 7/98)
NO _x –	100 lb/MMscf, AP-42, Table 1.4-1 (dated 7/98)
CO –	84 lb/MMscf, AP-42, Table 1.4-1 (dated 7/98)
VOC –	5.5 lb/MMscf, AP-42, Table 1.4-2 (dated 7/98)
Opacity –	06-096 CMR 101 (dated 5/03)

The BACT/BPT emission limits for the boilers are the following:

<u>Unit</u>		<u>PM</u> <u>(lb/hr)</u>	<u>PM₁₀</u> <u>(lb/hr)</u>	<u>SO₂</u> <u>(lb/hr)</u>	<u>NO_x</u> <u>(lb/hr)</u>	<u>CO</u> <u>(lb/hr)</u>	<u>VOC</u> <u>(lb/hr)</u>
WHS1	1.5 MMBtu/hr, natural gas	0.08	0.08	0.001	0.15	0.12	0.01
WHS2	1.5 MMBtu/hr, natural gas	0.08	0.08	0.001	0.15	0.12	0.01
WHS3	1.5 MMBtu/hr, natural gas	0.08	0.08	0.001	0.15	0.12	0.01
WHS4	1.5 MMBtu/hr, natural gas	0.08	0.08	0.001	0.15	0.12	0.01
VOC1	8.3 MMBtu/hr, natural gas	0.42	0.42	0.005	0.81	0.68	0.04
CNL1	2.8 MMBtu/hr, natural gas	0.14	0.14	0.002	0.27	0.23	0.02
CES1	5.9 MMBtu/hr, natural gas	0.30	0.30	0.003	0.58	0.49	0.03
SUP1	1.3 MMBtu/hr, #2 fuel oil	0.10	0.10	0.65	0.19	0.05	0.002
PrC1	2.1 MMBtu/hr, #2 fuel oil	0.17	0.17	1.05	0.30	0.08	0.003
CNL2 2.5 MMBtu/hr	natural gas	0.13	0.13	0.001	0.25	0.21	0.01
	#2 fuel oil	0.20	0.20	1.25	0.36	0.09	0.004
SES1 1.3 MMBtu/hr	natural gas	0.07	0.07	0.0008	0.13	0.11	0.01
	#2 fuel oil	0.10	0.10	0.65	0.19	0.05	0.002
SES2 1.3 MMBtu/hr	natural gas	0.07	0.07	0.0008	0.13	0.11	0.01
	#2 fuel oil	0.10	0.10	0.65	0.19	0.05	0.002

Visible emissions from each boiler firing natural gas shall not exceed 10% opacity on a 6-minute block average basis, except for no more than one (1) six (6) minute block average in a 3-hour period.

Visible emissions from each boiler firing #2 fuel oil shall not exceed 20% opacity on a 6-minute block average, except for no more than one (1) six (6) minute block average in a 3-hour period.

Prior to January 1, 2016, the fuel oil fired in Boilers SUP1, PrC1, CNL2, SES1, and SES2 shall be ASTM D396 compliant #2 fuel oil (maximum sulfur content of 0.5% by weight). Per 38 MRSA §603-A(2)(A)(3), beginning January 1, 2016, the Westbrook School Department's boilers which fire #2

fuel oil shall fire #2 fuel oil with a maximum sulfur content limit of 0.005% by weight (50 ppm); and beginning January 1, 2018, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.0015% by weight (15 ppm).

2. Periodic Monitoring

Periodic monitoring for these 12 boilers shall include recordkeeping to document fuel use for each boiler both on a monthly and a calendar year basis. Documentation shall include the type of fuel used and sulfur content of the fuel.

3. 40 CFR Part 63 Subpart JJJJJ

The 12 boilers addressed in this license are existing institutional boilers as defined in 40 CFR §63.11237 that are located at or are part of an area source of hazardous air pollutants (HAP), as defined in §63.2. The boilers firing natural gas are exempt from the requirements of this regulation. However, the oil fired boilers and any of the dual fueled boilers that have predominantly operated on oil over the past 12 months may be subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63, Subpart JJJJJ). However, 40 CFR Part 63, Subpart JJJJJ is currently under reconsideration by the EPA, and the applicability of the Subpart to this source may change, contingent upon the final specifications and requirements of the proposed amendments.

For informational purposes, a summary of the currently promulgated applicable federal 40 CFR Part 63, Subpart JJJJJ requirements is listed below. At this time, the Maine Department of Environmental Protection has not taken delegation of this area source MACT (Maximum Achievable Control Technology) rule promulgated by EPA; however, Westbrook School Department is still subject to the requirements. Notification forms and additional rule information can be found on the following website: <http://www.epa.gov/ttn/atw/boiler/boilerpg.html>.

a. Compliance Dates, Notifications, and Work Practice Requirements

i. Initial Notification of Compliance

An Initial Notification submittal to EPA was due on September 17, 2011. [40 CFR Part 63.11225(a)(2)]

ii. Boiler Tune-Up Program – Initial and Biennial

(a) A boiler tune-up program shall be implemented to include the tune-up of applicable boilers by March 21, 2012, according to the

rule currently in place. [40 CFR Part 63.11196(a)(1)] However, a No Action Assurance letter was issued on March 13, 2012, stating that EPA will exercise its enforcement discretion to not pursue enforcement action for failure to complete the required tune-up by the stated compliance date. The rule is expected to have a future compliance date in either 2013 or 2014 once the final revisions are promulgated.

- (b) The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:
 - 1. As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted; however, the burner must be inspected at least once every 36 months. [40 CFR Part 63.11223(b)(1)]
 - 2. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 CFR Part 63.11223(b)(2)]
 - 3. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. [40 CFR Part 63.11223(b)(3)]
 - 4. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 CFR Part 63.11223(b)(4)]
 - 5. Measure the concentration in the effluent stream of CO in parts per million (ppm), by volume, and oxygen in volume percent, before and after adjustments are made. [40 CFR Part 63.11223(b)(5)]
 - 6. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of start-up. [40 CFR Part 63.11223(b)(7)]
- (c) A Notification of Compliance Status shall be submitted to EPA no later than 120 days after conducting the initial boiler tune-up. [40 CFR Part 63.11225(a)(4) and 40 CFR Part 63.11214(b)]
- (d) The facility shall implement a biennial boiler tune-up program after the initial tune-up and initial compliance report has been submitted.
 - 1. Each biennial tune-up shall be conducted no more than 25 months after the previous tune-up. [40 CFR Part 63.11223(a)]
 - 2. The biennial report shall be maintained onsite and submitted, if requested, to EPA. The report shall contain the concentration of CO in the effluent stream (ppmv) and oxygen in volume percent, measured before and after the boiler tune-up, a description of any corrective actions taken as part of the tune-up of the boiler, and the type and amount of fuel used over the

12 months prior to the biennial tune-up of the boiler. [40 CFR Part 63.11223(b)(6)] The biennial compliance report shall also include the company name and address; a compliance statement signed by a responsible official certifying truth, accuracy, and completeness; and a description of any deviations and corrective actions. [40 CFR Part 63.11225(b)]

b. Recordkeeping

Records shall be maintained consistent with the requirements of 40 CFR Part 63, Subpart JJJJJ including the following [40 CFR Part 63.11225(c)]: copies of notifications and reports with supporting compliance documentation; identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned; documentation of fuel type(s) used monthly by each boiler; the occurrence and duration of each malfunction of the boiler; and actions taken during periods of malfunction to minimize emissions and actions taken to restore the malfunctioning boiler to its usual manner of operation. Records shall be in a form suitable and readily available for expeditious review.

C. Emergency Generators

Westbrook School Department operates four emergency generators, VOC2 (2.2 MMBtu/hr), CNL3 (1.1 MMBtu/hr), WMS (3.0 MMBtu/hr), and CES2 (1.1 MMBtu/hr). All four of the emergency generators fire diesel fuel with a maximum sulfur content of 0.0015% by weight. The generators were manufactured in 2001, 2002, 2010, and 2005, respectively.

1. BACT/BPT Findings

The BACT/BPT emission limits for the generators are based on the following:

PM, PM ₁₀ –	0.31 lb/MMBtu from AP-42 Table 3.3-1 (dated 10/96)
SO ₂ –	0.0015 lb/MMBtu, based on firing 0.0015% sulfur fuel for generators subject to 40 CFR Part 60, Subpart IIII (WMS); 0.05 lb/MMBtu, based on firing 0.05% sulfur fuel for the generators not subject to Subpart IIII (VOC2, CNL3, CES2)
NO _x –	4.41 lb/MMBtu, AP-42, Table 3.3-1 (dated 10/96);
CO –	0.95 lb/MMBtu, AP-42, Table 3.3-1 (dated 10/96);
VOC –	0.36 lb/MMBtu, AP-42, Table 3.3-1 (dated 10/96);
Opacity –	06-096 CMR 101 (dated 5/03)

The BACT/BPT emission limits for the generators are the following:

<u>Unit</u>	<u>PM</u> <u>(lb/hr)</u>	<u>PM₁₀</u> <u>(lb/hr)</u>	<u>SO₂</u> <u>(lb/hr)</u>	<u>NO_x</u> <u>(lb/hr)</u>	<u>CO</u> <u>(lb/hr)</u>	<u>VOC</u> <u>(lb/hr)</u>
Generator VOC2 2.2 MMBtu/hr	0.68	0.68	0.11	9.70	2.09	0.79
Generator CNL3 1.1 MMBtu/hr	0.34	0.34	0.06	4.85	1.05	0.40
Generator WMS 3.0 MMBtu/hr	0.93	0.93	0.005	13.23	2.85	1.08
Generator CES2 1.1 MMBtu/hr	0.34	0.34	0.06	4.85	1.05	0.40

Visible emissions from each of the diesel emergency generators shall not exceed 20% opacity on a 6-minute block average, except for no more than two (2) six (6) minute block averages in a 3-hour period.

Emergency generators are only to be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. Emergency generators are not to be used for prime power when reliable offsite power is available; nor used to supply power to an electric grid as part of a financial arrangement with an independent system operator (ISO) or another entity.

Each of the emergency generators shall be limited to 500 hours of operation a year, on a calendar year basis. Westbrook School Department shall keep records of the hours of operation for each unit. A non-resettable hour meter shall be installed and operated on the WMS Generator according to 40 CFR Part 60, Subpart IIII as detailed below, and a log shall be kept to document hours of operation for this unit.

2. 40 CFR Part 63, Subpart ZZZZ

The federal regulation 40 CFR Part 63, Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines*, is not applicable to the emergency generators listed above. The units are considered existing, emergency stationary reciprocating internal combustion engines at an area HAP source; however, they are considered exempt from the requirements of Subpart ZZZZ since they are categorized as a residential, commercial, or institutional emergency engine.

3. 40 CFR Part 60, Subpart IIII

The federal regulation 40 CFR Part 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE)* is applicable to Generator WMS (3.0 MMBtu/hr) listed

above since the unit was ordered after July 11, 2005, and manufactured after April 1, 2006. By meeting the requirements of Subpart IIII, the unit also meets the requirements found in the *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 CFR Part 63, Subpart ZZZZ.

Emergency Definition:

Emergency stationary internal combustion engine is defined in 40 CFR Part 60, Subpart IIII as any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc. Stationary CI ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

40 CFR Part 60, Subpart IIII Requirements:

- The generator shall be certified by the manufacturer as meeting the emission standards for new non-road compression ignition engines found in 40 CFR §60.4202. [40 CFR §60.4205(b)]
- The diesel fuel fired in the generator shall not exceed 15 ppm sulfur (0.0015% sulfur). [40 CFR §60.4207(b)]
- A non-resettable hour meter shall be installed and operated on the generator. [40 CFR §60.4209(a)]
- The generator shall be operated and maintained according to the manufacturer's emission-related written instructions or procedures developed by Westbrook School Department that are approved by the engine manufacturer. Westbrook School Department may only change those emission-related settings that are permitted by the manufacturer. [40 CFR §60.4211(a)]
- The generator shall be limited to 100 hours/year for maintenance and testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving or generating income or a financial arrangement with another entity). [40 CFR §60.4211(f)]
- No initial notification is required for emergency engines. [40 CFR §60.4214(b)]

D. Parts Washer

The parts washer utilized in the Westbrook Regional Vocational Center utilizes TEKUSOLV II as the solvent. The unit is subject to *Solvent Cleaners*, 06-096 CMR 130 (as amended), and records shall be kept documenting compliance.

E. Annual Emissions

1. Total Licensed Annual Emissions

Westbrook School Department shall be restricted to the following annual emissions, on a calendar year basis. The tons per year limits were calculated based on 8760 hr/yr of operation for each boiler and 500 hrs/yr of operation for each generator.

Total Licensed Annual Emissions for the Facility

Tons/year

(used to calculate the annual license fee)

	<u>PM</u>	<u>PM₁₀</u>	<u>SO₂</u>	<u>NO_x</u>	<u>CO</u>	<u>VOC</u>
<u>Boilers Firing Natural Gas</u> WHS 1, 2, 3, and 4 VOC1 CNL1 CES1	5.08	5.08	0.06	9.85	5.98	0.57
<u>Boilers Firing #2 Fuel Oil</u> SUP1 PrC1	1.2	1.2	7.45	2.12	0.53	0.02
<u>Dual-Fuel Boilers*</u> CNL2 SES 1 and 2	2.22	2.22	13.81	3.95	1.84	0.12
<u>Generators</u> VOC2 CNL3 WMS CES2	0.57	0.57	0.06	8.16	1.75	0.67
Total TPY	9.07	9.07	21.38	24.08	10.10	1.38

* For the dual fueled boilers, the emissions from combusting both fuels were compared, and the highest values for each pollutant were included in this table to represent maximum potential emissions.

2. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011, through 'Tailoring' revisions made to EPA's *Approval and Promulgation of*

Implementation Plans, 40 CFR Part 52, Subpart A, §52.21 Prevention of Significant Deterioration of Air Quality rule. Greenhouse gases, as defined in 06-096 CMR 100 (as amended), are the aggregate group of the following gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO₂e).

Based on the facility's fuel use limit(s), the worst case emission factors from AP-42, IPCC (Intergovernmental Panel on Climate Change), and *Mandatory Greenhouse Gas Reporting*, 40 CFR Part 98, and the global warming potentials contained in 40 CFR Part 98, Westbrook School Department is below the major source threshold of 100,000 tons of CO₂e per year. Therefore, no additional licensing requirements are needed to address GHG emissions at this time.

III. AMBIENT AIR QUALITY ANALYSIS

According to 06-096 CMR 115, the level of air quality analyses required for a renewal source shall be determined on a case-by case basis. Modeling is not required for a renewal if the total emissions of any pollutant released do not exceed the following and there are no extenuating circumstances:

<u>Pollutant</u>	<u>Tons/Year</u>
PM	25
PM ₁₀	25
SO ₂	50
NO _x	100
CO	250

Based on the total facility licensed emissions, Westbrook School Department is below the emissions level required for modeling.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source

- will receive Best Practical Treatment,
- will not violate applicable emission standards, and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-114-71-G-N subject to the following conditions.

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S.A. §347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [06-096 CMR 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 115]
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353-A. [06-096 CMR 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]

- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 CMR 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
 - A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 - 1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
 - 2. pursuant to any other requirement of this license to perform stack testing.
 - B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - C. submit a written report to the Department within thirty (30) days from date of test completion.[06-096 CMR 115]
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
 - A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and

- B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
- C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 CMR 115]

- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 115]
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 CMR 115]
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 115]

SPECIFIC CONDITIONS

(16) Boilers

A. Fuel

- 1. Prior to January 1, 2016, the #2 fuel oil fired in the boilers identified as SUP1, PrC1, CNL2, SES1, and SES2 shall be ASTM D396 compliant (max. sulfur content of 0.5% by weight). [06-096 CMR 115, BPT]

2. Beginning January 1, 2016, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.005% by weight (50 ppm). [38 MRSA §603-A(2)(A)(3)]
3. Beginning January 1, 2018, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.0015% by weight (15 ppm). [38 MRSA §603-A(2)(A)(3)]
4. Compliance shall be demonstrated by fuel records from the supplier showing the quantity, type, and the percent sulfur of the fuel delivered (if applicable). Records of annual fuel use shall be kept on a monthly and a calendar year basis. [06-096 CMR 115, BPT]

B. Emissions shall not exceed the following:

<u>Unit</u>	<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>Origin and Authority</u>
Boilers firing No. 2 fuel oil (SUP1, PrC1, CNL2, SES1, SES2)	PM	0.08	06-096 CMR 115, BPT
Boilers firing natural gas (WHS1, WHS2, WHS3, WHS4, VOC1, CNL1, CES1, CNL2, SES1, SES2)	PM	0.05	

C. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

<u>Unit</u>	<u>PM (lb/hr)</u>	<u>PM₁₀ (lb/hr)</u>	<u>SO₂ (lb/hr)</u>	<u>NO_x (lb/hr)</u>	<u>CO (lb/hr)</u>	<u>VOC (lb/hr)</u>
WHS1 1.5 MMBtu/hr, natural gas	0.08	0.08	0.001	0.15	0.12	0.01
WHS2 1.5 MMBtu/hr, natural gas	0.08	0.08	0.001	0.15	0.12	0.01
WHS3 1.5 MMBtu/hr, natural gas	0.08	0.08	0.001	0.15	0.12	0.01
WHS4 1.5 MMBtu/hr, natural gas	0.08	0.08	0.001	0.15	0.12	0.01
VOC1 8.3 MMBtu/hr, natural gas	0.42	0.42	0.005	0.81	0.68	0.04
CNL1 2.8 MMBtu/hr, natural gas	0.14	0.14	0.002	0.27	0.23	0.02
CES1 5.9 MMBtu/hr, natural gas	0.30	0.30	0.003	0.58	0.49	0.03
SUP1 1.3 MMBtu/hr, #2 fuel oil	0.10	0.10	0.65	0.19	0.05	0.002
PrC1 2.1 MMBtu/hr, #2 fuel oil	0.17	0.17	1.05	0.30	0.08	0.003

CNL2 2.5 MMBtu/hr	natural gas	0.13	0.13	0.001	0.25	0.21	0.01
	#2 fuel oil	0.20	0.20	1.25	0.36	0.09	0.004
SES1 1.3 MMBtu/hr	natural gas	0.07	0.07	0.0008	0.13	0.11	0.01
	#2 fuel oil	0.10	0.10	0.65	0.19	0.05	0.002
SES2 1.3 MMBtu/hr	natural gas	0.07	0.07	0.0008	0.13	0.11	0.01
	#2 fuel oil	0.10	0.10	0.65	0.19	0.05	0.002

D. Visible Emissions

1. Visible emissions from each boiler firing natural gas shall not exceed 10% opacity on a 6-minute block average basis, except for no more than one (1) six (6) minute block average in a 3-hour period.
2. Visible emissions from each boiler firing #2 fuel oil shall not exceed 20% opacity on a 6-minute block average, except for no more than one (1) six (6) minute block average in a 3-hour period.

(17) Emergency Generators

- A. The generators are each limited to 500 hours per year total operation, on a calendar year basis. Compliance shall be demonstrated by a written log of all generator operating hours. [06-096 CMR 115]
- B. The fuel oil sulfur content shall be limited to 0.05% sulfur for the VOC2, CNL3, and CES2 Generators and 0.0015% sulfur for the WMS Generator. Compliance shall be demonstrated by fuel records from the supplier documenting the type of fuel delivered and the sulfur content of the fuel. [06-096 CMR 115, BPT]
- C. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator VOC2 2.2 MMBtu/hr	0.68	0.68	0.11	9.70	2.09	0.79
Generator CNL3 1.1 MMBtu/hr	0.34	0.34	0.06	4.85	1.05	0.40
Generator WMS 3.0 MMBtu/hr	0.93	0.93	0.005	13.23	2.85	1.08

Generator CES2 1.1 MMBtu/hr	0.34	0.34	0.06	4.85	1.05	0.40
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Each of the emergency generators shall be limited to 500 hours of operation a year, on a calendar year basis. Westbrook School Department shall keep records of the hours of operation for each unit. A non-resettable hour meter shall be installed and operated on the WMS Generator according to 40 CFR Part 60, Subpart IIII, and a log shall be kept to document hours of operation for this unit.

- D. Visible emissions from each of the diesel generators shall not exceed 20% opacity on a 6-minute block average, except for no more than two (2) six (6) minute block averages in a 3-hour period. [06-096 CMR 101]
- E. Emergency generators are only to be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. Emergency generators are not to be used for prime power when reliable offsite power is available; nor used to supply power to an electric grid as part of a financial arrangement with an independent system operator (ISO) or another entity.
- F. The WMS Emergency Generator shall meet the applicable requirements of 40 CFR Part 60, Subpart IIII, including the following:
1. The generator shall be certified by the manufacturer as meeting the emission standards for new non-road compression ignition engines found in §60.4202. [40 CFR §60.4205(b)]
 2. The diesel fuel fired in the WMS Generator shall not exceed 15 ppm sulfur (0.0015% sulfur). Compliance with the fuel sulfur content limit shall be based on fuel records from the supplier documenting the type of fuel delivered and the sulfur content of the fuel. [40 CFR §60.4207(b) and 06-096 CMR 115]
 3. A non-resettable hour meter shall be installed and operated on the WMS Generator. [40 CFR §60.4209(a)]
 4. The generator shall be limited to 100 hours/year for maintenance and testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving or generating income or a financial arrangement with another entity). These limits are based on a 12-month rolling total. Compliance shall be demonstrated by a written log of all generator operating hours. [40 CFR §60.4211(f) and 06-096 CMR 115]

5. The generator shall be operated and maintained according to the manufacturer's emission-related written instructions or procedures developed by Westbrook School Department that are approved by the engine manufacturer. Westbrook School Department may only change those emission-related settings that are permitted by the manufacturer. [40 CFR §60.4211(a)]

(18) **Parts Washer**

- A. The parts washer operated by Westbrook School Department is subject to *Solvent Cleaners*, 06-096 CMR 130 (as amended).
- B. Westbrook School Department shall keep records of the amount of solvent added to the parts washer. [06-096 CMR 115, BPT]
- C. The following are exempt from the requirements of 06-096 CMR 130 [06-096 CMR 130]:
 1. Solvent cleaners using less than two liters (68 oz) of cleaning solvent with a vapor pressure of 1.00 mmHg, or less, at 20° C (68° F);
 2. Wipe cleaning; and,
 3. Cold cleaning machines using solvents containing less than or equal to 5% VOC by weight.
- D. The following standards apply to cold cleaning machines that are applicable sources under Chapter 130.
 1. Westbrook School Department shall attach a permanent conspicuous label to each unit summarizing the following operational standards [06-096 CMR 130]:
 - (i) Waste solvent shall be collected and stored in closed containers.
 - (ii) Cleaned parts shall be drained of solvent directly back to the cold cleaning machine by tipping or rotating the part for at least 15 seconds or until dripping ceases, whichever is longer.
 - (iii) Flushing of parts shall be performed with a solid solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray) at a pressure that does not exceed 10 psig. Flushing shall be performed only within the freeboard area of the cold cleaning machine.
 - (iv) The cold cleaning machine shall not be exposed to drafts greater than 40 meters per minute when the cover is open.
 - (v) Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the degreaser.
 - (vi) When a pump-agitated solvent bath is used, the agitator shall be

operated to produce no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used.

- (vii) Spills during solvent transfer shall be cleaned immediately. Sorbent material used to clean spills shall then be immediately stored in covered containers.
- (viii) Work area fans shall not blow across the opening of the degreaser unit.
- (ix) The solvent level shall not exceed the fill line.

- 2. The remote reservoir cold cleaning machine shall be equipped with a perforated drain with a diameter of not more than six inches. [06-096 CMR 130]

- (19) Westbrook School Department shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S.A. §605).

DONE AND DATED IN AUGUSTA, MAINE THIS 22nd DAY OF May, 2012.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Melanie R. [Signature]
PATRICIA W. AHO, COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: March 12, 2012

Date of application acceptance: March 14, 2012

Date filed with the Board of Environmental Protection:

This Order prepared by Jane Gilbert, Bureau of Air Quality.

